

## IN THE SPECIFICATION

Replace the 6<sup>th</sup> paragraph which begins on page 3 and ends on page 4, with the following

- -Encouraged by the initial leads in the laboratory for rapid detection and isolation of somaclonal variants by using the protocol reported by us (S. P. S. Khanuja, A. K. Shasany, S. Dhawan, S. Kumar, Rapid procedure for isolating somaclones of altered genotypes in *Mentha arvensis*. *J. Med. Aroma. Plant Sci.* 20 (1998) 359-361), we generated 3000 independent somaclones. These clones were subjected to detection of molecular variation at the tissue culture stage itself through RAPD profiling. DNA was isolated from 40 mg of leaf tissue and Polymerase chain reactions (PCRs) were carried out in 25  $\mu$ l volume. A reaction tube contained 25 ng of DNA, 0.2 unit of Taq DNA polymerase, 100  $\mu$ l each of dNTPs, 1.5 mM MgCl<sub>2</sub> and 5 p mol of decanucleotide primers. The amplifications were carried out using a thermal cycler (MJ Research, USA). The amplified products were loaded in 1.2% agarose gel containing 0.5  $\mu$ g ml<sup>-1</sup> of ethidium bromide and photographed by Polaroid system. Twelve decamer primers having the sequences AAATCGGAGC (SEQ ID NO: 1), GTCCTACTCG (SEQ ID NO: 2), GTCCTTAGCG (SEQ ID NO: 3), TGCGCGATCG (SEQ ID NO: 4), AACGTACGCG (SEQ ID NO: 5), GCACGCCGGA (SEQ ID NO: 6), CACCCCTGCGC (SEQ ID NO: 7), CTATGCCCGC (SEQ ID NO: 8), CGGGATCCGC (SEQ ID NO: 9), GCGAATTCCG (SEQ ID NO: 10), CCCTGCAGGC (SEQ ID NO: 11), CCAAGCTTGC (SEQ ID NO: 12) were used to analyse all the *in vitro* regenerated clones. Out of 3000 regenerated clones 245 showed variation at DNA level in the RAPD profiles compared to the control plant "Himalaya".- -

14

Replace the 3<sup>rd</sup> paragraph which begins on page ~~18~~ and ends on page 15, with the following

- -Randomly Amplified Polymorphic DNA analysis : The RAPD profiles of the plant "Sambhav" were unambiguously able to establish its distinct identity as completely different from the parent plant "Himalaya" as well as the known released varieties. The plant of the present invention was developed by screening

molecular variants among somaclones already differentiated as distinct, unique and novel at DNA level. The plant is having desirable morphological and economical traits in a rare unmatchable combination and is available only with us in CIMAP. No variation in the RAPD patterns was observed in the analysis of the micropropagated as well as field raised population in successive generations indicating the stability of the genotype. The 20 MAP primers (MAP 01 to MAP 20) with the sequence AAATCGGAGC (SEQ ID NO: 1), GTCCTACTCG (SEQ ID NO: 2), GTCCTTAGCG (SEQ ID NO: 3), TGC CGATCG (SEQ ID NO: 4), AACGTACGCG (SEQ ID NO: 5), GCACGCCGGA (SEQ ID NO: 6), CACCCTGCGC (SEQ ID NO: 7), CTATCGCCGC (SEQ ID NO: 8), CGGGATCCGC (SEQ ID NO: 9), GCGAATTCCG (SEQ ID NO: 10), CCCTGCAGGC (SEQ ID NO: 11), CCAAGCTTGC (SEQ ID NO: 12), GTGCAATGAG (SEQ ID NO: 13), AGGATACGTG (SEQ ID NO: 14), AAGATAGCGG (SEQ ID NO: 15), GGATCTGAAC (SEQ ID NO: 16), TTGTCTCAGG (SEQ ID NO: 17), CATCCCGAAC (SEQ ID NO: 18), GGACTCCACG (SEQ ID NO: 19), AGCCTGACGC (SEQ ID NO: 20) and 20 OPJ (Operon Technologies Inc, USA) were used for the analysis and similarity indices were computed to generate similarity matrix among existing varieties and the plant Sambhav (Table 3). The OPJ primers (01 to 20) were procured from Operon technologies, USA. The MAP primers were used to develop a unique and distinct RAPD profile (Drawing sheet #3, Photograph #2) of the Plant. - -

17  
95  
5.2.05

Replace the 4<sup>th</sup> paragraph which begins on page 18, with the following  
- - 4. The plantlets thus generated were examined for any genotypic change by comparing their RAPD profiles with that of cv Himalaya using the 12 random decanucleotide primers having the sequences

AAATCGGAGC (SEQ ID NO: 1), GTCCTACTCG (SEQ ID NO: 2),  
GTCCTTAGCG (SEQ ID NO: 3), TGC CGATCG (SEQ ID NO: 4),  
AACGTACGCG (SEQ ID NO: 5), GCACGCCGGA (SEQ ID NO: 6),  
CACCCTGCGC (SEQ ID NO: 7), CTATCGCCGC (SEQ ID NO: 8),  
CGGGATCCGC (SEQ ID NO: 9), GCGAATTCCG (SEQ ID NO: 10),

CCCTGCAGGC (SEQ ID NO: 11), CCAAGCTTGC (SEQ ID NO: 12).--

Replace the 3<sup>rd</sup> paragraph which begins on page 19, with the following

- -3. These clones from individual variants were tested for uniformity through RAPD profiling after isolating DNA from 40 mg of tissue, using the random primers (AAATCGGAGC (SEQ ID NO: 1), GTCCTACTCG (SEQ ID NO: 2), GTCCTTAGCG (SEQ ID NO: 3), TGCAGCGATCG (SEQ ID NO: 4), AACGTACGCG (SEQ ID NO: 5), GCACGCCGGA (SEQ ID NO: 6), CACCCCTGCGC (SEQ ID NO: 7), CTATCGCCGC (SEQ ID NO: 8), CGGGATCCGC (SEQ ID NO: 9), GCGAATTCCG (SEQ ID NO: 10), CCCTGCAGGC (SEQ ID NO: 11), CCAAGCTTGC (SEQ ID NO: 12)).--

85  
5.2.05